

CLAIMS

What is claimed is:

- 1 1. A method of using a computer system to graphically
2 display search results, comprising:
3 sending a search request to a search engine, wherein the
4 search request includes a navigation location processed into a
5 format required by the search engine;
6 receiving search results from the search engine, wherein
7 the search results are proximal links related to the
8 navigation location, wherein the proximal links are related to
9 the search request;
10 displaying the search results in a display area, wherein
11 the search results are represented as graphical shapes drawn
12 in the display area and at any given time represent data for a
13 time quantum, and wherein the graphical shapes reference data
14 and respond to user selections allowing a user to access
15 referenced data.
- 1 2. The method of claim 1, wherein the proximal links
2 may be at least one navigation location.
- 1 3. The method of claim 1, wherein the proximal links
2 may be a subweb.

09761617-011604

1 4. The method of claim 1, wherein the received proximal
2 links are provided to an output target.

1 5. The method of claim 1, wherein the graphical shapes
2 are grouped by the inter-relatedness of the data referenced by
3 the graphical shapes.

1 6. The method of claim 5, wherein the inter-relatedness
2 of the data is represented by graphical shapes, wherein
3 subsequent data containing references within the scope of
4 primary data are represented by subsequent graphical shapes
5 that are enveloped by primary graphical shapes.

1 7. The method of claim 5, wherein the inter-relatedness
2 of the data is represented by graphical shapes, wherein
3 subsequent data containing no references within the scope of
4 primary data are represented by subsequent graphical shapes
5 that do not intersect and are not enveloped by primary
6 graphical shapes.

1 8. A system of using a computer to graphically display
2 search results, comprising:

3 means to send a search request to a search engine,
4 wherein the search request includes a navigation location
5 processed into a format required by the search engine;

6 means to receive search results from the search engine,
7 wherein the search results are proximal links related to the
8 navigation location, wherein the proximal links are related to
9 the search request;

10 means to display the search results in a display area,
11 wherein the search results are represented as graphical shapes
12 drawn in the display area and at any given time represent data
13 for a time quantum, and wherein the graphical shapes reference
14 data and respond to user selections allowing a user to access
15 referenced data.

1 9. The system of claim 8, wherein the proximal links
2 may be at least one navigation location.

1 10. The system of claim 8, wherein the proximal links
2 may be a subweb.

1 11. The system of claim 8, wherein the received proximal
2 links are provided to an output target.

1 12. The system of claim 8, wherein the graphical shapes
2 are grouped by the inter-relatedness of the data referenced by
3 the graphical shapes.

1 13. The system of claim 12, wherein the inter-
2 relatedness of the data is represented by graphical shapes,
3 wherein subsequent data containing references within the scope
4 of primary data are represented by subsequent graphical shapes
5 that are enveloped by primary graphical shapes.

1 14. The system of claim 8, wherein the inter-relatedness
2 of the data is represented by graphical shapes, wherein
3 subsequent data containing no references within the scope of
4 primary data are represented by subsequent graphical shapes
5 that do not intersect and are not enveloped by primary
6 graphical shapes.

09764637-011601

1 15. A method of using a computer system for searching

2 for relevant data, comprising:

3 receiving a search request from a user, wherein the
4 search request includes a search subject and navigation
5 location;

6 processing the search request into a format required by a
7 search engine;

8 sending the processed search request to the search
9 engine, wherein the processed search request is processed for
10 the search engine;

11 receiving search results, which are proximal links,
12 wherein the proximal links are related to the navigation
13 location from the search request;

14 determining which proximal links are relevant, wherein
15 relevant links are those that are related to the search
16 subject of the search request; and

17 transmitting the search results to the user.

1 16. The method of claim 15, further comprising

2 determining if too many proximal links have been found.

1 17. The method of claim 15, further comprising
2 processing relevant links for output if not too many proximal
3 links have been found.

1 18. The method of claim 15, further comprising providing
2 the relevant links to an output target.

1 19. The method of claim 18, wherein the output target is
2 for is a temporal user interface.

1 20. The method of claim 15, wherein the proximal links
2 may be at least one navigation location.

1 21. The method of claim 15, wherein the proximal links
2 may be a subweb.

09764647-011601

1 22. A system of using a computer to search for

2 information, comprising:

3 means to obtain a query, wherein the query includes a
4 search subject and navigation location;

5 means to process the navigation location into a format
6 required by a search engine;

7 means to provide the search engine with a location
8 request, wherein the location request is the processed
9 navigation location;

10 means to obtain navigation location related proximal
11 links, wherein the location proximal links are related to the
12 location request;

13 means to process the location proximal links for
14 relevance; and

15 means to identify subject links related to the search
16 subject from the processed location proximal links.

1 23. The system of claim 22, further comprising means to
2 determine if an expanse breach has occurred.

1 24. The system of claim 22, further comprising means to
2 process the identified subject links for output if no expanse
3 breach occurred.

1 25. The system of claim 22, further comprising means to
2 provide the processed proximal links to an output target.

1 26. The system of claim 25, wherein the output target is
2 for is a temporal user interface.

1 27. The system of claim 22, wherein the proximal links
2 may be at least one navigation location.

1 28. The system of claim 22, wherein the proximal links
2 may be a subweb.

1 29. A method of using a computer to display help
2 information, comprising:

3 monitoring function execution;

4 storing a current system state;

5 determining what functions have been executed by
6 examining latest stored system states if a request for help
7 has been made;

8 displaying help information based on the functions that
9 have been last executed.

1 30. The method of claim 29, further comprising
2 determining if the last executed function has been made by
3 mistake.

09761617.011601

1 31. The method of claim 30, wherein the determination
2 that the last executed function has been made by mistake is
3 made by a user engaging an undo function.

1 32. The method of claim 29, further comprising
2 instantiating a latest stored system state the last executed
3 function has been made by mistake.

1 33. An interaction computer interface invocable by an
2 application program responsive to user selections to invoke
3 application module commands, comprising:

4 an information pool;

5 information clouds, wherein the information clouds are
6 data structures referencing information;

7 information crystals, wherein the information crystals
8 reference information in information clouds and form at a
9 passing of a temporal quantum;

10 information raindrops, wherein the information raindrops
11 are information crystals that form in an information pool.

1 34. The interface of claim 33, wherein a liquid graphic
2 transformation effect is applied to the information pool.

1 35. The interface of claim 33, wherein the information
2 pool is displayed in a window.

1 36. The interface of claim 33, wherein a highlighted
2 portion of the information pool is displayed as a subview.

1 37. The interface of claim 33, wherein the information
2 pool includes a pool bottom.

1 38. The interface of claim 37, wherein the pool bottom
2 displays multimedia.

1 39. The interface of claim 37, wherein the pool bottom
2 displays advertising.

1 40. The interface of claim 33, wherein the information
2 pool displays temporal information.

1 41. The interface of claim 33, wherein the information
2 clouds reference information from a data analyzer.

1 42. The interface of claim 33, wherein the information
2 crystals reference navigation locations.

1 43. The interface of claim 33, wherein the information
2 crystals reference subjects.

1 44. The interface of claim 33, wherein the information
2 crystals reference multimedia.

1 45. The interface of claim 33, wherein the information
2 crystals reference a number representing how many alternate
3 navigation locations refer to a particular navigation
4 location.

1 46. The interface of claim 33, wherein the information
2 raindrops visually appear as analogue to real world raindrops
3 falling into a pool.

1 47. The interface of claim 33, wherein groups of
2 raindrops represent groups of data in a subweb.

1 48. The interface of claim 33, wherein the appearance of
2 a raindrop may vary based on specified criteria.

1 49. The interface of claim 33, wherein the appearance of
2 a raindrop may vary in color.

1 50. The interface of claim 33, wherein the appearance of
2 a raindrop may vary in size.

1 51. The interface of claim 33, wherein the appearance of
2 a raindrop may vary in thickness.

1 52. The interface of claim 33, wherein the appearance of
2 a raindrop may vary in transparency.

1 53. The interface of claim 33, wherein the appearance of
2 a raindrop may be complimented with complementary dynamic
3 visual cues.

1 54. The interface of claim 48, wherein a specified
2 criterion is the type of a document.

1 55. The interface of claim 48, wherein a specified
2 criterion is a size of a document.

1 56. The interface of claim 48, wherein a specified
2 criterion is a number representing how many alternate
3 navigation locations refer to a particular navigation
4 location.

1 57. The interface of claim 48, wherein a specified
2 criterion is a number of multimedia files at a navigation
3 location.

1 58. The interface of claim 48, wherein a specified
2 criterion is staleness of a link.

1 59. The interface of claim 48, wherein a specified
2 criterion is a media content type.

1 60. The interface of claim 48, wherein a specified
2 criterion is a subject relevancy ranking.

1 61. The interface of claim 48, further comprising a
2 dynamic mapping and search selection facility.

1 62. The interface of claim 61, wherein the search
2 selection facility allows modification of the specified
3 criteria.

1 63. The interface of claim 33, further comprising a time
2 line facility.

1 64. The interface of claim 33, further comprising an
2 interpretive help tool.

1 65. The interface of claim 33, further comprising a
2 focus box.

1 66. The interface of claim 33, further comprising a
2 skimming pebble facility.

1 67. A method of using a computer to display data,
2 comprising:
3 displaying an information pool;
4 receiving information from a data source;
5 generating information clouds, wherein the information
6 clouds are data structures referencing information obtained
7 from the data source;
8 generating information crystals, wherein the information
9 crystals reference information in information clouds and form
10 at a passing of a temporal quantum; and
11 displaying information raindrops, wherein the information
12 raindrops are information crystals that form in an information
13 pool.

1 68. The method of claim 67, wherein the data source is a
2 data analyzer.

1 69. The method of claim 67, further comprising applying
2 a liquid graphic transformation effect to the information
3 pool.

1 70. The method of claim 67, wherein the information pool
2 is displayed in a window.

1 71. The method of claim 67, wherein a highlighted
2 portion of the information pool is displayed as a subview.

1 72. The method of claim 67, wherein the information pool
2 includes a pool bottom.

1 73. The method of claim 72, further comprising
2 displaying multimedia in the pool bottom.

1 74. The method of claim 72, further comprising
2 displaying advertising in the pool bottom.

1 75. The method of claim 67, further comprising
2 displaying temporal information in the information pool.

1 76. The method of claim 67, wherein the information
2 clouds obtain information from a data analyzer.

1 77. The method of claim 67, wherein the information
2 crystals reference navigation locations.

1 78. The method of claim 67, wherein the information
2 crystals reference subjects.

1 79. The method of claim 67, wherein the information
2 crystals reference multimedia.

1 80. The method of claim 67, wherein the information
2 crystals reference a number representing how many alternate
3 navigation locations refer to a particular navigation
4 location.

1 81. The method of claim 67, wherein the information
2 raindrops visually appear as analogue to real world raindrops
3 falling into a pool.

1 82. The method of claim 67, wherein groups of raindrops
2 represent groups of data in a subweb.

1 83. The method of claim 67, wherein the appearance of a
2 raindrop may vary based on specified criteria.

1 84. The method of claim 67, wherein the appearance of a
2 raindrop may vary in color.

1 85. The method of claim 67, wherein the appearance of a
2 raindrop may vary in size.

1 86. The method of claim 67, wherein the appearance of a
2 raindrop may vary in thickness.

1 87. The method of claim 67, wherein the appearance of a
2 raindrop may be complimented with complementary dynamic visual
3 cues.

1 88. The method of claim 67, wherein the appearance of a
2 raindrop may vary in translucency.

1 89. The method of claim 83, wherein a specified
2 criterion is the type of a document.

1 90. The method of claim 83, wherein a specified
2 criterion is a size of a document.

1 91. The method of claim 83, wherein a specified
2 criterion is a number representing how many alternate
3 navigation locations refer to a particular navigation
4 location.

1 92. The method of claim 83, wherein a specified
2 criterion is a number of multimedia files at a navigation
3 location.

1 93. The method of claim 83, wherein a specified
2 criterion is staleness of a link.

1 94. The method of claim 83, wherein a specified
2 criterion is a media content type.

1 95. The method of claim 83, wherein a specified
2 criterion is a subject relevancy ranking.

1 96. The method of claim 83, further comprising a dynamic
2 mapping and search selection facility.

1 97. The method of claim 96, wherein the search selection
2 facility allows modification of the specified criteria.

1 98. In memory, an interaction interface invocable by an
2 application program responsive to user selections to invoke
3 application module commands, comprising:

4 a graphical shape to represent temporal information;
5 a display area to display the graphical shapes,
6 wherein the graphical shapes drawn in the display
7 area at any given time represent data for a time quantum,
8 wherein the graphical shapes reference data and
9 respond to user selections allowing a user to access
10 referenced data;

11 a temporal selection facility to specify any given time
12 quantum in a chronological data set responsive to user
13 selections,

14 wherein the temporal selection facility is disposed
15 in communication with the display area such that user
16 selections specifying a time quantum instruct the display area
17 to display temporal information for a specified time quantum
18 from a chronological data set.

1 99. The interface of claim 98, wherein a liquid graphic
2 transformation effect is applied to the display area.

1 100. The interface of claim 98, wherein the display area
2 is displayed in a window.

1 101. The interface of claim 98, wherein a highlighted
2 portion of the display area is displayed as a subview.

1 102. The interface of claim 98, wherein the display area
2 includes a lower display layer.

1 103. The interface of claim 102, wherein the lower
2 display layer displays multimedia.

1 104. The interface of claim 102, wherein the lower
2 display layer displays advertising.

1 105. The interface of claim 98, wherein the display area
2 displays temporal information.

1 106. The interface of claim 98, wherein the chronological
2 data set is obtained from a data analyzer.

1 107. The interface of claim 98, wherein the data the
2 shapes reference navigation locations.

1 108. The interface of claim 98, wherein the data the
2 shapes reference multimedia.

1 109. The interface of claim 98, wherein the shapes
2 reference data from a chronological data set.

1 110. The interface of claim 98, wherein the shapes
2 visually appear as analogue to real world raindrops falling
3 into a pool.

1 111. The interface of claim 98, wherein groups of shapes
2 represent groups of data in a subweb.

1 112. The interface of claim 98, wherein the appearance of
2 a shape may vary based on specified criteria.

1 113. The interface of claim 98, wherein the appearance of
2 a shape may vary in color.

1 114. The interface of claim 98, wherein the appearance of
2 a shape may vary in size.

1 115. The interface of claim 98, wherein the appearance of
2 a shape may vary in thickness.

1 116. The interface of claim 98, wherein the appearance of
2 a shape may vary in transparency.

1 117. The interface of claim 98, wherein the appearance of
2 a shape may be complimented with complementary dynamic visual
3 cues.

1 118. The interface of claim 112, wherein a specified
2 criterion is the type of a document.

1 119. The interface of claim 112, wherein a specified
2 criterion is a size of a document.

1 120. The interface of claim 112, wherein a specified
2 criterion is a number representing how many alternate
3 navigation locations refer to a particular navigation
4 location.

1 121. The interface of claim 112, wherein a specified
2 criterion is a number of multimedia files at a navigation
3 location.

1 122. The interface of claim 112, wherein a specified
2 criterion is staleness of a link.

1 123. The interface of claim 112, wherein a specified
2 criterion is a media content type.

1 124. The interface of claim 112, wherein a specified
2 criterion is a subject relevancy ranking.

1 125. The interface of claim 98, further comprising a
2 dynamic mapping and search selection facility.

1 126. The interface of claim 125, wherein the search
2 selection facility allows modification of the specified
3 criteria.

1 127. The interface of claim 98, further comprising an
2 interpretive help tool.

1 128. The interface of claim 98, further comprising a
2 focus box.

1 129. The interface of claim 98, further comprising a
2 skimming pebble facility.

1 130. The interface of claim 98, wherein the graphical
2 shapes are grouped by the inter-relatedness of the data
3 referenced by the graphical shapes.

1 131. The interface of claim 130, wherein the inter-
2 relatedness of the data is represented by graphical shapes,
3 wherein subsequent data containing references within the scope
4 of primary data are represented by subsequent graphical shapes
5 that are enveloped by primary graphical shapes.

1 132. The interface of claim 130, wherein the inter-
2 relatedness of the data is represented by graphical shapes,
3 wherein subsequent data containing no references within the
4 scope of primary data are represented by subsequent graphical
5 shapes that do not intersect and are not enveloped by primary
6 graphical shapes.

1 133. The interface of claim 130, wherein the inter-
2 relatedness of the data is represented by graphical shapes,
3 wherein subsequent data containing some references within the
4 scope of primary data and some references outside the scope of
5 primary data are represented by subsequent graphical shapes
6 that intersect with primary graphical shapes.